UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SEAGATE TECHNOLOGY LLC
C/O Murabito Hao & Barnes LLP
Two North Market Street
Third Floor
San Jose, CA 95113

EXAMINER
ZARE, SCOTT A

ART UNIT	PAPER NUMBER
3687	

NOTIFICATION DATE	DELIVERY MODE
01/10/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

officeaction@mhbpatents.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>17 November 2010</u>.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-20* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-20* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

A Non-Final Rejection was mailed on 03/02/2010 in which claims 1-22 were

rejected. Applicant has responded by filing Amendments to the Claims accompanied by

Remarks, which the Examiner found persuasive. However, in response, the Examiner

mailed another Non-Final Rejection on 08/18/2010 in which claims 1-22 were rejected

on new grounds. Applicant has responded to the Non-Final Rejection mailed

08/18/2010 by submitting Amendments to the Claims accompanied by Remarks,

received 11/17/2010, which are now the subject of this Office Action.

Claims 1-15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over *Jenkins et al.* (US 2002/0188499, referred hereinafter as "*Jenkins*",

filed October 29, 2001) in view of *Feldman et al.* (US 2008/0027837, hereinafter

"*Feldman*")

In regard to claims 1, 17, and 20, *Jenkins* teaches a computer-implemented

method for distributing parts to customer locations in a volume-based fair share mode,

comprising the steps:

- using a processor to prioritize requests for parts from inventory (see

  paragraphs 178-180);

- using a processor to prioritize locations that have need for the parts (see

  paragraphs 178-180); and

- using a processor to form a shipment plan by iteratively assigning a defined

  minimum size allotment of the parts (see paragraph 181 and 189, disclosing

"major shipping quantity"; see also paragraph 236; see also paragraph 272,

disclosing "recalculat[ing] priority values").

However, *Jenkins* fails to teach iteratively assigning a defined minimum size

allotment of parts *to the location having a current priority* and then reprioritizing the

priorities of all customer locations and assigning a defined minimum size allotment of

the parts to a customer location having a new current priority, until one of all of the parts

from inventory have been assigned and no location reports a need of more of the parts

assigned.

Feldman teaches:

iteratively assigning a defined minimum size allotment of parts to the location

having a current priority and then reprioritizing the priorities of all customer locations

and assigning a defined minimum size allotment of the parts to a customer location

having a new current priority, until one of all of the parts from inventory have been

assigned and no location needs more of the parts assigned (see paragraph 42,

disclosing "the incremental effect of one-by-one allocation of safety stock units to the

Locations 1, 2, 3, the column entitled 'winning location' indicating which Location 1, 2 or

3 receives the next additional safety stock unit on the basis of its incremental availability

being the greatest an any given prevailing draw allocation," as illustrated in Fig 9).

It would have been obvious to one of ordinary skill in the art to have modified

Jenkins to include iteratively assigning a defined minimum size allotment of parts to the

location having a current priority as taught by *Feldman* to implement a distribution policy

that allocates units "on the basis of relative merit in accordance with an allocation

decision criterion subject to one or more constraints rather than in some arbitrary absolute fashion." See *Feldman*, paragraph 16. Such a feature would improve any distribution method with limited inventory in the same manner.

In regard to claim 2, *Jenkins* teaches a method further comprising defining the minimum size allotment (see paragraph 181 and 189, disclosing "major shipping quantity").

In regard to claim 3, *Jenkins* fails to teach wherein each location having a need for the parts from inventory has a percentage need for said parts, and wherein the forming a shipment plan includes assigning a minimum size allotment to a priority location in each iteration and thereafter re-assigning the priorities such that each location having a need is driven to a same percentage need.

Feldman further teaches:

wherein each location having a need for the parts from inventory has a percentage need for said parts, and wherein the forming a shipment plan includes assigning a minimum size allotment to a priority location in each iteration and thereafter re-assigning the priorities such that each location having a need is driven to the same percentage need assigned (see paragraph 42, disclosing "the incremental effect of one-by-one allocation of safety stock units to the Locations 1, 2, 3, the column entitled 'winning location' indicating which Location 1, 2 or 3 receives the next additional safety

stock unit on the basis of its incremental availability being the greatest an any given

prevailing draw allocation," as illustrated in Fig 9).

It would have been obvious to one of ordinary skill in the art to have modified

Jenkins to include iteratively assigning a defined minimum size allotment of parts to the

location having a current priority wherein each location has a percentage need for said

parts as taught by *Feldman* to implement a distribution policy that allocates units "on the

basis of relative merit in accordance with an allocation decision criterion subject to one

or more constraints rather than in some arbitrary absolute fashion." See *Feldman*,

paragraph 16. Such a feature would improve any distribution method with limited

inventory in the same manner.

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In regard to claim 4, *Jenkins* further discloses performing a pallet size pass on

the shipment plan. (See paragraph 266.)

In regard to claim 5, *Jenkins* discloses a pallet size pass based on a threshold

quantity at which multiples of shippers are cut in full pallets. (See paragraph 266.)

In regard to claim 6, *Jenkins* discloses a pallet quantity that is a quantity of parts

that constitutes a full pallet. (See paragraph 266.)

In regard to claim 7, *Jenkins* discloses a shipper that passes through the pallet size pass that has a number of parts that is greater than the threshold quantity and equal to or less than the pallet quantity. (See paragraph 266.)

In regard to claim 8, *Jenkins* discloses a volume based filter pass on the shipment plan. (See paragraph 266.)

In regard to claim 9, *Jenkins* discloses a based filter pass based on a minimum shipment quantity defining a smallest amount of parts for a specific location or part type. (See paragraph 189, disclosing "major ship quantity")

In regard to claim 10, *Jenkins* discloses wherein the volume based filter pass is based on a percentage impact threshold that is a function of a recommended shipper and a target inventory for a specific location or part type (see paragraph 206, disclosing "fair-share allocation").

In regard to claim 11, *Jenkins* discloses wherein the parts are shipped from a single source (see Claim 19).

In regard to claim 12, *Jenkins* discloses wherein the parts are shipped from multiple sources, and further comprising determining splitting the source of the parts to fulfill the requests for parts from the locations (see paragraph 224).

In regard to claim 13, *Jenkins* discloses wherein the determining includes forming a balanced supply/demand (See entire disclosure).

In regard to claim 14, *Jenkins* discloses wherein the determining further comprises using geographic sales rules in which specified geographic sales shipments are prioritized over optimization of shipments (See paragraph 234).

In regard claim 15, *Jenkins* discloses wherein the determining further comprises using a business rule filtering in which specified business rules are prioritized over optimization of shipments (See paragraph 234).

In regard to claim 20, *Jenkins* teaches a system for determining distribution of goods to customer locations, comprising:

a processor that receives requests for parts to be delivered to customer locations (see paragraphs 57-58 and FIGS 1A-1B); and

means for forming a shipment plan of the goods to the customer locations on a volume-based fair share basis (See paragraph 232).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins* in view of *Feldman* in further view of *Chappel* (US 7,236,940).

In regard to claim 16, the combination of *Jenkins* and *Feldman* fails to disclose

creating a set of all supply demand scenarios with all possible combinations of fully

providing available supply to a demand point in a matrix, and subsequently performing a

sum of squares on the matrix, with the highest sum of squares forming a shipment plan.

Chappel teaches a method and system for accessing and planning business

operations utilizing rule-based statistical modeling including creating a set of all supply

demand scenarios with all possible combinations of fully providing available supply to a

demand point in a matrix, and subsequently performing a sum of squares on the matrix,

with the highest sum of squares forming a shipment plan (See column 7 at lines 45-47,

via a statistical business model calculating the sum-of-squares).

It would have been obvious for a person having ordinary skill in the art at the time

the invention was made to modify the combination of *Jenkins* and *Feldman* to include

the notoriously old and well know methods of statistical modeling as taught by *Chappel*

in order to calculate a deviation from a mean, the highest deviation representing the

highest priority.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Jenkins in view of *Feldman* in further view of *Benda et al.* (US 6,937,992, referred

hereinafter as "*Benda*").

In regard to claim 18, the combination of *Jenkins* and *Feldman* fails to explicitly

disclose performing lot sizing optimization after the shipment plan is formed.

Benda teaches a transport vehicle capacity maximization logistics system and

method including performing lot sizing optimization after the shipment plan is formed

(See col. 11 at lines 56-58, via optimization of pallets for each given SKU).

In view of the disclosure of *Benda*, it would have been obvious to one of ordinary

skill in the art at the time the invention was made to modify the system and method for

order based planning as taught by *Jenkins* and *Feldman* to include optimizing

shipments before they are delivered in order to decrease shipping costs. Such a feature

would improve any shipping system in the same manner and would provide predictable

results.

In regard to claim 19, the combination of *Jenkins* and *Feldman* fails to explicitly

disclose splitting the shipping of the parts when there are multiple sources of the parts.

Benda teaches a transport vehicle capacity maximization logistics system and

method including splitting the source of the parts when there are multiple sources of the

parts (See col. 14 at lines 12-14, via merchandise that is shipped from multiple sources

being optimized at a cross-dock for shipment to the same distributor).

From the disclosure of *Benda*, it would have been obvious to one of ordinary skill

in the art at the time the invention was made to modify the system and method for

order-based planning as taught by the combination of *Jenkins* and *Feldman* to include

optimizing shipments before they are delivered in order to decrease shipping costs.

Response to Arguments

Applicant's arguments, see *Remarks*, filed 11/17/2010, with respect to the

rejection(s) of claim(s) 1-20 under 35 USC §103, have been fully considered but are not

persuasive.

Claim Rejections - 35 USC § 103

The rejections under 35 USC §103 have been traversed under two rationales.

First, Applicant argues that the combination of *Jenkins* and *Feldman* fails to teach all

elements of Applicant's claimed method. Specifically, with respect to claims 1, 17, and

20, Applicant argues that the combination of *Jenkins* and *Feldman* fails to disclose the

following element:

> . . . using the processor to form a shipment plan by iteratively assigning <u>a</u>
> <u>defined minimum size allotment of the parts to a customer location having</u>
> <u>a current priority</u> and <u>then reprioritizing the priorities of all customer</u>
> <u>locations</u> and <u>assigning a defined minimum size allotment of the parts to a</u>
> <u>customer location having a new current priority</u>, until one of all of the parts
> from inventory have been assigned and no customer location reports a
> need of more of the parts assigned, <u>wherein each current priority is</u>
> <u>determined from all customer location for reach iteration</u>.
> (emphasis as added by Applicant)

Applicant argues specifically that the cited references fails to disclose

"assigning a defined minimum size allotment of the parts to a customer location

having a current priority and then reprioritizing the priorities of all customer

locations and assigning a defined minimum size allotment of the parts to a

customer location having a new priority, . . . wherein each current priority is

determined from all customer location for each iteration."

As Applicant has acknowledged, see *Remarks*, filed 11/17/2010, at pg. 8,

the Examiner has relied upon *Feldman* to teach the disputed feature. In

attempting to distinguish *Feldman* from the limitations of claim 1, Applicant's

argues that *Feldman* teaches that a distribution policy which allocates available

items on the basis of relative merit to prevent an occurrence of a sellout

compared to expected occurrences of return, rather than based upon "priority."

See *Remarks*, filed 11/17/2010, at pgs. 9-10.

This issue turns on the interpretation of "priority." It should again be noted that

"during patent examination, the claims are given the broadest reasonable interpretation

consistent with the specification." MPEP §904.01 and §2111, citing *In re Morris*, 127

F3d 1048 (Fed. Cir. 1997). In addition, "limitations appearing in the specification but not

recited in the claim should not be read into the claim. See MPEP §2106, citing *E-Pass*

Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir.

2003). Thus, under its broadest reasonable interpretation in view of the Specification,

"priority" is construed as –the right to take precedence in obtaining certain supplies,

services, or facilities–. Thus, based on such an interpretation, the Examiner maintains

that iteration preformed in *Feldman* is based upon a "priority" wherein "priority" is "on the

basis of its incremental availability being the greatest at any given prevailing draw

allocation." See *Feldman*, paragraph [0042.] Thus, while *Feldman* may use different

criterion than that the present invention in making a determination of which location has

priority, *Feldman* nevertheless assigned parts to customer locations having a current

priority and the reprioritizes the priorities until at least one of all of the parts has been

assigned. Consequently, Applicant's argument is found to be unpersuasive. If

Applicant seeks to distinguish the claimed invention from the prior art on the basis of the

"priority" limitation, the Examiner advises Applicant to amend the claims to limit the

priority determination to the particular criterion used in the present invention, for

example, prioritizing the locations based upon proportional demand (i.e., percent need).

Secondly, Applicant argues that the combination of *Jenkins* and *Feldman* is

improper because there is no motivation to combine these two references.   In response

to applicant's argument that there is no teaching, suggestion, or motivation to combine

the references, the Examiner recognizes that obviousness may be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*,

958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex,

Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, both references are directed

toward allocating stock, and both contain an incremental allocation process. While

Jenkins has been relied upon to disclose an incremental process for distributing limited

stock among shipments, *Jenkins* fails to disclose using the process for distributing

limited stock among <u>locations</u>. *Feldman* has been referenced by the Examiner to fill this

gap and teach that one of ordinary skill in the art at the time of the invention would have

recognized that such a feature could be used not only to prioritize shipments, but to

prioritize the destination locations where the shipments are to be distributed. In

addition, *Feldman* provides a rationale for including such a feature - allocation units to

locations on the basis of relative merit. Consequently, Applicant's second argument is

also unpersuasive.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to SCOTT A. ZARE whose telephone number is (571)270-

3266. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00

p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matt Gart can be reached on (571) 272-3955. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott A Zare/
Examiner, Art Unit 3687
January 5, 2011

/Vanel Frenel/

Primary Examiner, Art Unit 3687